

REMARKS

The final Office action mailed on 24 January 2003 (Paper No. 5) and the Advisory Action mailed on 6 May 2003 (Paper No. 7) have been carefully considered.

The specification is being amended to correct minor errors and improve form. Claims 1, 2, 4 and 8 thru 10 are being amended to improve their form. Thus, claims 1 thru 10 are pending in the application.

In paragraph 2 of the Office action, the Examiner rejected claims 1 thru 10 under 35 U.S.C. §103 for alleged unpatentability over Kurtenbach *et al.*, U.S. Patent No. 6,414,700 and Foster, U.S. Patent No. 6,211,870. For the reasons stated below, it is submitted that the invention recited in the claims, as now amended, is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

Request for Entry of Second Amendment After Final

It should be noted that claims 1, 2, 4 and 8 thru 10 are being amended for the sole purpose of improving their form. Therefore, the claim amendments do not raise new issues requiring further consideration or search by the Examiner, and thus this Amendment After Final should be entered.

In the Advisory Action (Paper No. 7), the Examiner stated that the Amendment After Final filed on 22 April 2003 (Paper No. 6) would not be entered because the amendments "are not

deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal" (quoting from paragraph 2(c) of the Advisory Action). Applicants respectfully disagree.

The amendments to the specification place the application in better form for appeal by improving form and by eliminating certain typographical and other errors. For example, a spelling error at paragraph 4, line 5 is being corrected; a reference numeral at page 5, line 12 is also being corrected; references to the various blocks representing steps of the method shown in the flowchart of Figure 3 are being inserted at page 6, line 14-page 7, line 3; form is being improved at page 7, lines 18-20; and typographical errors are being corrected at page 8, lines 5, 11 and 20.

In the continuation sheet for paragraph 2 of the Advisory Action, the Examiner stated that the amendment to page 7, lines 7-10 of the specification requires "further consideration". The amendment in question merely adds the following sentence: "If not, a return to step S320 is executed" (note that the typographical error pointed out by the Examiner is now corrected). The latter sentence refers to Figure 3 and merely states that, as shown in Figure 3 of this application as originally filed, if step S360 results in a determination that a cancellation has not been performed, a return to step S320 is executed. Since Figure 3, as originally filed, has clearly shown the step or operation in question (return to step S320), the Examiner has been afforded the opportunity to consider this step or operation from the outset of the examination of this application, and thus the addition of a sentence merely rendering the specification complete and consistent with originally filed Figure 3 should not, and does not, require "further consideration".

The amendments to the claims also simplify the issues for appeal by improving form and eliminating what some Examiners might consider to be recitations objectionable under 35 U.S.C. §112 (second paragraph). For example, in claims 2 and 9, the phrase “one or more” has been replaced by the preferable phrase “at least one”; improper use of the articles “a” or “an” referring to an element already recited in claims 4 and 8 has been corrected by substituting the correct articles “said” and “the”; improper grammatical usage of “responsively” in claims 8 and 9 has been corrected by substituting the correct expressions “in response” and “responsive”.

In the continuation sheet for paragraph 2 of the Advisory Action, the Examiner stated that the rejection in claim 8 of “menu items selected by the user in response to selection thereof by the user” required “further consideration”. The original wording of claim 8 indicated that a selection signal is generated “responsively to a user’s selections thereof”. This improper grammatical form clearly resulted from a translation error in translating the original Korean priority application into English for filing in the U.S. Patent and Trademark Office. The proposed amendment to claim 8 recites that the selection signal is generated “in response to selection thereof by the user”(quoting from claim 8, lines 8-9 on page 8 of this Second Amendment after Final). The change in wording does not change the meaning of the original recitation; it merely improves the grammatical form. Therefore, contrary to the assertion by the Examiner in the continuation sheet for paragraph 2 of the Advisory Action, the amendment should not, and does not, require “further consideration”.

To summarize, the amendment to the specification and claims are merely for the purpose

of correcting minor errors and improving form. They do not change the meaning of the language or recitations in question. Moreover, they do not introduce new subject matter or subject matter not previously considered by the Examiner, and therefore they do not raise new issues or questions requiring further consideration or search. As a result, this Second Amendment after Final should be entered if the Examiner decides to maintain the final rejection.

Patentability Over the Prior Art

Kurtenbach *et al.* '700 discloses a graphical user interface (GUI) that allows access to a large number of commands without subjecting the user to information overload. The disclosed GUI provides a single interaction technique allowing grouping by function, and has an interface that is used in essentially the same way by novices and experts. The GUI is characterized by pop-ups include menu bars and marking menu zones, wherein the menu bars overlap the zones. The menu bars are positioned around a central marking zone with the application menu bar positioned outermost and the window menu bar located innermost. The menu bars are arranged in a "stair step" pattern, and commands are spread uniformly or justified within each menu bar. The zones form a visual square, and are divided into a central zone and four outer zones, and user customizable marking menus are activated when a mouse button is held down while the cursor is in one of the zones.

Foster '870 discloses a portable hand-held remote control unit device with an editing system which may be utilized for selecting designated functions in several remotely controllable multimedia processing units.

In paragraph 2 of the final Office action, the Examiner alleges that Kurtenbach *et al.* '700 discloses "a button unit comprising at least one hotkey button adapted for generating a key signal corresponding to a menu item on the OSD menu" (quoting from paragraph 2, lines 12 on page 2 of the Office action). However, the Examiner admits that Kurtenbach *et al.* '700 "fails to teach an OSD unit for outputting an OSD character display signal to a video processing unit in response to a said key signal, whereby actuation by a user of said hotkey button causes a screen display of one or more OSD characters" (quoting from page 3, lines 1-4 of the final Office action). Then, in order to compensate for the latter deficiency in the disclosure of Kurtenbach *et al.* '700, the Examiner cites Foster '870, stating that Foster '870 teaches an editing system in which a customized hotkey can be created, and then alleges that "[t]his customization allows the user to actuate a personal hotkey while causing the screen to display one or more OSD characters." (quoting from page 3, lines 9-11 of the final Office action).

For reasons stated below, Applicant opposes the combination of references cited by the Examiner on the grounds that it constitutes an improper combination of references under 35 U.S.C. §103. However, even if the combination of references is proper (and Applicant does not concede that it is), the combination does not disclose or suggest each element and function of independent apparatus or system claims 1 and 8, and each element and/or step of independent method claims 5 and 7. For example, where in the references is there a disclosure of the button unit, memory unit, OSD unit and control unit recited in claim 1, or the TV display, memory unit, selecting means, generating means, control means, receiving means, reading (or fetching and reading) means and sending means recited in claim 8? Furthermore, where in references cited is there a disclosure of

the three steps recited in method claim 5 or the steps recited in method claim 7? Neither the previous Office action nor the present final Office action provides an indication as to where the above elements or steps are disclosed. Whereas the Examiner does provide some general references to certain figures or certain portions of the text of the two cited patents, there is no stated correlation between the elements and steps/functions recited in the claims and specific elements or textual passages in the cited patents.

In the continuation sheet for paragraph 5 of the Advisory Action, the Examiner merely states that “Kurtencech[sic] teaches a TV display, memory unit, selecting means, generating means, control means, receiving means, reading means, and sending means (fig. 2; fig. 6, #114, #110, #112)”(quoting from the continuation sheet of the Advisory Action). However, although this statement is slightly more specific than statements raised in the two previous Office actions, there is still no statement on the record as to what specific elements in the cited reference correspond to each of the eight elements of the invention as clarified by the Examiner’s statement (quoted above). In fact, in the above-quoted statement, the Examiner identifies eight claimed elements as being allegedly disclosed in Kurtenbach *et al.* ‘700, but the statement only contains three listed reference or numbers (110, 112 and 114). That is, not all of the claimed elements are accounted for.

Furthermore, in citing the combination of references under 35 U.S.C. §103, the Examiner asserts (at page 3, lines 11-13 of the final Office action) the following:

“It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the hotkey actuations taught by Foster with the GUI coupled with hotkeys taught by Kurtenbach. Doing so gives the user greater flexibility in establishing personalized hotkeys.”

Although this rejection is based on what is alleged to be the ordinary level of skill in the art, the final Office action and the record do not contain any findings based on substantial evidence as to the ordinary level of skill in the pertinent art. In *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999), the Federal Circuit overturned an obviousness rejection by the Board because of its failure to make the kind of obviousness legal analysis that the Supreme Court commanded in *Graham v. John Deere Co.*, 376 U.S. 1, 17-18 (1966). The Federal Circuit has consistently held that such a legal analysis must begin with specific findings of fact regarding the level of ordinary skill in the art. Thus the *Dembiczak* decision held that an obviousness rejection must be reversed if, like the instant final rejection, it fails to contain “specific findings of fact regarding the level of ordinary skill in the art.” 175 F.3d at 1000-01, 50 USPQ2d at 1618. In addition, the findings that the Examiner makes as to the ordinary level of skill must be supported by substantial evidence of record. *In re Kaplan*, 789 F.2d 1574, 1580, 229 USPQ 678, 683 (Fed. Cir. 1986) (“Even if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was.”).

Contrary to the state of the law governing rejections under 35 U.S.C. §103, the rejection in this final Office action lacks findings and analysis that the Federal Circuit considers essential to support a rejection based on ordinary skill in the art. In addition, the rejection in the final Office

action lacks substantial evidence of record to support such findings, even if they had been made.

In addition, the final Office action does not contain findings to support existence of a specific teaching, suggestion, or motivation in the prior art to combine Kurtenbach *et al.* '700 and Foster '870. The only statement made in the Office action is as follows:

“Doing so [combining references] gives the user greater flexibility in establishing personalized hotkeys” (quoting from page 3, lines 13-14 of the final Office action).

Before the Examiner may combine the disclosures of two or more prior art references in order to establish a *prima facie* case of obviousness, it must be established on the record that some specific suggestion, motivation, or teaching is found in the prior art which would have led an ordinary artisan to select those specific references, and to adapt and combine them in the same way that the inventor did. *Karsten Mfg. Corp. v. Cleveland Gulf Corp.*, 243 F.3d 1376, 1385, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001) (“In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention.”); *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1998) (teaching or motivation or suggestion to combine is an “essential evidentiary component of an obviousness holding”); *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546, 48 U.S. P.Q.2d 1321 (Fed. Cir. 1998) (“There must be a teaching or suggestion within the prior art, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to

particular sources of information, to select particular elements, and to combine them in the way they were combined by the inventor.”); *In re Rouffet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998); *In re Chu*, 66 F.3d 292 (Fed. Cir. 1995); *Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994) (“When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.”); *In re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1943-44 (Fed. Cir. 1992); *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1586, 1589-90 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q.2d 929, 933 (Fed. Cir. 1984).

The statement in the final Office action that combining the references “gives the user greater flexibility in establishing personalized hotkeys” is merely the opinion of the Examiner, and thus it does not satisfy the requirements of the Federal Circuit’s case-law, particularly *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), for a teaching, suggestion, or motivation. That is, the statement in the final Office action does not refer to any specific teaching, suggestion, or motivation in the prior art. At best, it says that combining the references would provide the benefits that the specification of the present application teaches, but that is pure hindsight. The final Office action merely states the benefits that accrue once the combination of elements is made, and it does not explain how or why an artisan, not knowing of the teachings of the present application, would be motivated by a review of the disclosure of Kurtenbach *et al.* '700 to seek and study the disclosure of Foster '870, and to employ the disclosure of Foster '870 in modifying that of Kurtenbach *et al.* '700 while selecting particular elements from the two references in order to arrive at the

combination of elements or steps/functions disclosed by the Applicant. The final Office action contains no specific, finding “as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed,” as required by *Lee*, 277 F.3d at 1343, quoting *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

In rejecting claim 4, the Examiner states the following:

“Doing so [combining the references] gives the user the ability to customize video and audio output control keys” (quoting from lines 14-15 on page 4 of the final Office action).

However, this is merely a statement of what the invention does, and does not constitute a teaching, suggestion, or motivation in the prior art for making the combination of references. Giving the user that specific capability is only taught in the specification of the present application, and that teaching cannot be used against the present Applicant as held by the Federal Circuit in the *Lee* case, *supra*.

Independent claim 8 is recited in means-plus-function format. It corresponds generally to claim 1, but is directed more narrowly to a TV system. As a claim in means-plus-function format, the claim incorporates by reference the structures described in the specification that correspond to the respective recited functions and equivalents thereof. *Chiuminatta Concrete Concepts v. Cardinal Indus., Inc.*, 145 F.3d 1303, 46 U.S.P.Q.2d 1752 (Fed. Cir. 1997).

The structure described in the specification is concededly not anticipated by any reference of record. Further, nothing in the prior art of record provides a specific teaching, suggestion, or motivation to combine selected elements and/or functions of Kurtenbach *et al.* '700 in the manner that those selected elements are combined in the presently claimed invention. Thus, the subject matter claimed in the present application has not been shown to be obvious over the cited references.

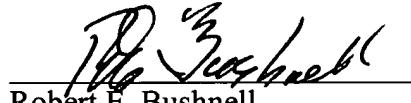
In rejecting independent claim 8 (on pages 4 and 5 of the final Office action), the Examiner does not state where, in the references, there is a disclosure of each element and function recited in claim 8. Moreover, in certain cases where the Examiner cites an element in Foster '870 which is alleged to correspond to a claimed element, the correspondence does not exist. For example, the Examiner cites element 1166 in Figure 10 of Foster '870 as corresponding to the claimed "receiving means", the claimed "reading means", and other "means" or functions as well (see page 5, lines 6-20 of the final Office action). In fact, element 1160 is merely an icon or menu item entitled "DAD" designating a function or functions reserved for a parent of a household in which the system of Foster '870 is functioning (see column 11, lines 15-17 of Foster '870).

In addition, the final Office action does not state where, in the primary reference (Kurtenbach *et al.* '700), one of ordinary skill in the art would find the suggestion or motivation to seek the Foster '870 reference for the purpose of modifying the disclosure of the primary reference. In fact, in the rejection of claim 8, the Kurtenbach *et al.* '700 reference is only mentioned briefly (see page 4, line 20 of the final Office action).

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A fee of \$110.00 is incurred by the filing of a Petition for a one-month extension of time. Applicant's check drawn to the order of Commissioner accompanies this Second Amendment After Final. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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